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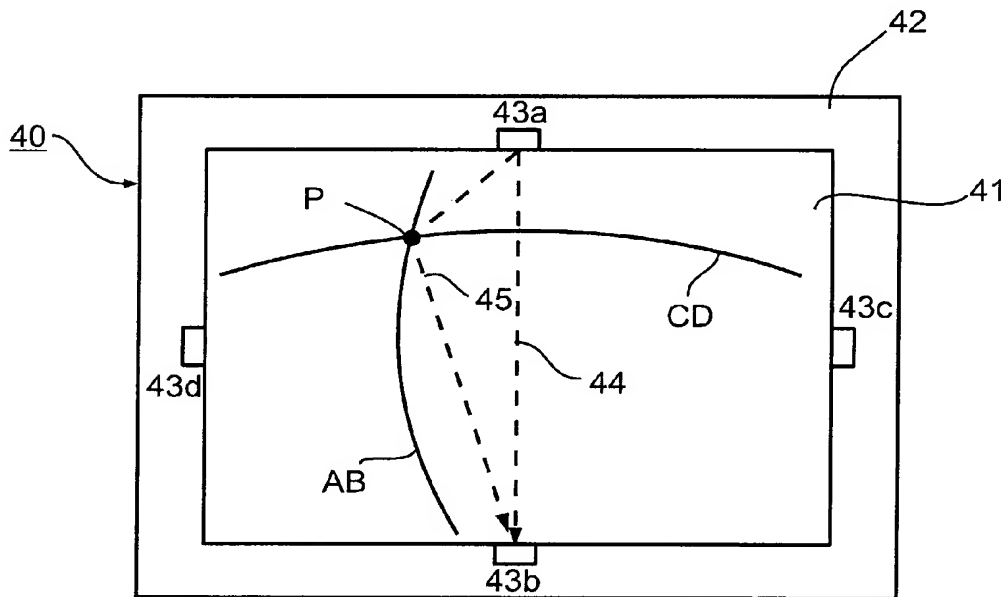
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(54) Title: METHOD AND APPARATUS FOR DETECTING PANEL CONDITIONS



(57) Abstract: A method and apparatus for detecting a predetermined condition of a panel by transmitting a cyclically-repeating energy wave through the material (41) of the panel from a first location (43a) to a second location (43b); measuring the transit time of the cyclically-repeating energy wave form the fist location to the second location; and utilizing the measured transit time to detect the predetermined condition including the force on, the temperature of, a deformation in, the fatigue condition of, or a fracture in, structural panel, the presence of a force applied to, water on, or breakage in of the panel.

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